

## BRIDGE INSPECTION REPORT

Page 1 of 3

Status: Released

Printed On: 8/5/2021

Agency: Washington State

CD Guid: 65ee1f75-307b-457f-9ef4-2da4d8932890

Release Date: 7/23/2021

Program Mgr: Evan M Grimm

Br. No. 12/624

SID 0002241A

Br. Name TOUCHET R

Carrying US 12

Route On 00012

Mile Post 319.35

Intersecting TOUCHET R

Route Under

Mile Post

## SIGNATURE ON FILE

Inspector's Signature GFC

Cert # B1163

Cert Exp Date 1/12/2022

Co-Inspector's Signature AAS

## Inspections Performed

Report Type	Inspection Type	Date	Freq	Hours	Inspector	Cert No	Co-Insp.
<u>Routine</u>		<u>6/2/2021</u>	<u>24</u>	<u>1.0</u>	<u>GFC</u>	<u>B1163</u>	<u>AAS</u>
Inventory		4/9/2019			SVH		

8	<input type="checkbox"/>	Alignment (1661)	40	<input type="checkbox"/>	Operating Tons (1552)	1	<input type="checkbox"/>	Bridge Rails (1684)	0	<input type="checkbox"/>	No Utilities (2675)
7	<input type="checkbox"/>	Deck Overall (1663)		<input type="checkbox"/>	Op RF (1553)	1	<input type="checkbox"/>	Transition (1685)	9.00	<input type="checkbox"/>	Asphalt Depth (2610)
6	<input type="checkbox"/>	Superstructure (1671)	24	<input type="checkbox"/>	Inventory Tons (1555)	1	<input type="checkbox"/>	Guardrails (1686)	1900	<input type="checkbox"/>	Year Built (1332)
6	<input type="checkbox"/>	Substructure (1676)		<input type="checkbox"/>	Inv RF (1556)	0	<input type="checkbox"/>	1 Terminals (1687)	1936	<input type="checkbox"/>	Year Rebuilt (1336)
9	<input type="checkbox"/>	Culvert (1678)	5	<input type="checkbox"/>	Operating Level (1660)	32.0	<input type="checkbox"/>	Bridge Rail Ht (2612)			
7	<input type="checkbox"/>	Chan/Protection (1677)	A	<input type="checkbox"/>	Open/Closed (1293)	15.0	<input type="checkbox"/>	Design Curb Ht (2611)			
N	<input type="checkbox"/>	Pier/Abut/Prot (1679)	5	<input type="checkbox"/>	Structural Eval (1657)						
8	<input type="checkbox"/>	Waterway (1662)	2	<input type="checkbox"/>	Deck Geometry (1658)						
3	<input type="checkbox"/>	Scour (1680)	9	<input type="checkbox"/>	Underclearance (1659)						

NBIS Risk Category
Routine: High Risk
Underwater: No Risk Category

## Inspection Flags

Y <input type="checkbox"/>	* Soundings (2693)	<input type="checkbox"/>	Measure Clearance (2694)	<input type="checkbox"/>	Revise Rating (2688)	<input type="checkbox"/>	Photos (2691)	<input type="checkbox"/>	QA Flag (2695)
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## BMS Elements

Element	Element Description	Total	Units	CS 1	CS 2	CS 3	CS 4
13	Bridge Deck Surface	1350	SF	1350	0	0	0
38	Concrete Slab	1350	SF	1314	0	36	0
145	Earth Filled Concrete Arch	105	LF	103	0	2	0
200	Abutment Fill	2	EA	2	0	0	0
212	Concrete Submerged Pier Wall	101	LF	97	0	4	0
215	Concrete Abutment	74	LF	74	0	0	0
266	Concrete Sidewalk & Supports	663	SF	663	0	0	0
330	Metal Bridge Railing	312	LF	312	0	0	0
361	Scour	3	EA	1	2	0	0
800	Asphaltic Concrete (AC) Overlay	4368	SF	4368	0	0	0

## Notes

0 Bridge is oriented west to east.

13 Deck surface applies only to widened portion, per plans there is no concrete deck over the arch.  
Deck surface is covered with ACP, see element 800.

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<b>Br. No.</b> 12/624	<b>SID</b> 0002241A	<b>Br. Name</b> TOUCHET R	
<b>Carrying</b> US 12		<b>Route On</b> 00012	<b>Mile Post</b> 319.35
<b>Intersecting</b> TOUCHET R		<b>Route Under</b>	<b>Mile Post</b>

## Notes (Continued)

38 Slabs were added to both side of the bridge for widening. At the piers and abutments there are hairline diagonal cracks. Overhangs and slab bottoms have areas of medium scale, map cracking, exfoliation and some leaching. Slab edge corners have a few small delaminations.  
Span 2 south slab edge below rail joints has several shallow spalls with exposed short vertical rebar (estimate 6 sf in CS3). See photo #22.  
Span 2 north slab has an 8sf spall and 6 sf soffit edge cracking indicating delamination. See photos #35 and #36.  
Span 3 south slab east end has a 10 lf long horizontal crack with rust stains (10 sf in CS3). See photo #24.  
Span 3 north slab has 6 sf soffit edge cracking.

145 Arch has scattered shallow spalls and delaminations on the edges and bottom surface.  
Edges have longitudinal cracks.  
There is some water leakage from the construction joints in the bottom of the arches.

212 Pier 3 wall has a few pieces of vertical rebar exposed in the abraded west face near the north end.

215 Abutments have vertical hairline cracks.

266 Contract 19391 closed the sidewalk to the public, with concrete blocks and small "no trespassing" signs at both approaches. In addition, the original concrete pedestrian railing has been removed and the metal pedestrian railing specified in Contract 19391 was never installed. See photo #34.

Sidewalks not inspected as an accessible part of the structure and conditions not recorded since this portion of structure has been abandoned as part of Contract 19391.

330 Contract 19391 installed new thrie beam rails mounted on metal posts attached to deck. This contract also removed the concrete rails on both sides of the bridge. See deck and elevation photos #32 and #33. REPAIR #12805 VERIFIED

361 Touchet River flows north to south. Main channel is under Span 3.  
Span 1 is enclosed, no hydraulic opening.  
Pier 2 has riprap at both ends.  
Span 2 downstream apron riprap in place, infilled with cobbles, based on comparison with 6/16/2003 photo #8. Apron is not undermined as of 6/2/2021. See photo #38.  
Pier 3 has riprap in place at both noses. The upstream nose of Pier 3 appears to accumulate debris annually, see photos #29 and #37. REPAIR #12807.  
Span 3 downstream apron has riprap in place. See photo #39.  
Pier 4 appears to have riprap mostly buried in silt.  
Span 4 is enclosed, no hydraulic opening.

1677 Banks are well vegetated with some minor deterioration both upstream and downstream. See photos #30 and #31.  
East bank downstream has heavy riprap south of Pier 3.  
Upstream east bank has a few pieces of riprap.

1680 Scour prevention work in 2009 effectively mitigates the scour criticality of Pier 3 and Pier 4 along with the channel under Span 3. Pier 2 and Span 2 is still prone to scour during the 100-year flood and keeps the bridge in a scour critical rating. The riprap along downstream side of the apron must be maintained. The original Pier 3 spread footing is 3' 0" thick and the widened Pier 3 spread footing is 10' 6" thick.  
The main channel is under Span 3. High flows pass under Span 2 at the upstream nose of Pier 3 and exits at the downstream end of Pier 2. High velocity is created by contraction between the channel bank and the nose of Pier 3. Expansion of the flow under Span 2 creates back water flow to Pier 3 where energy is lost and sedimentation is taking place. Flood water is cutting a secondary channel from Pier 2 back to the main channel, directing flow toward the west main pier of the rail bridge just downstream.

1687 New terminals installed under Contract 19391.

## Repairs

Repair No	Pr	R	Repair Descriptions	BMS	Noted	Maint	Verified
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**Carrying** US 12 **Route On** 00012 **Mile Post** 319.35  
**Intersecting** TOUCHET R **Route Under** **Mile Post**

Repairs (Continued)							
Repair No	Pr	R	Repair Descriptions	BMS	Noted	Maint	Verified
12805	2	B	Repair concrete bridge railing on both sides of bridge by removing loose concrete, removing the rust from the exposed rebar, applying rust inhibitor, and placing patching material. (Contract 19391 completed on 12/18/2019 removed both concrete rails.)	330	7/24/2007		6/2/2021
12807	1	B	Remove debris on upstream nose of Pier 3. GFC/AAS 6/2/2021: Per GAS, retained original repair, though 2019 debris has evidently been removed and replaced by new debris.	361	6/18/2019		

Inspections Performed and Resources Required									
Report Type	Date	Freq	Hrs	Insp	CertNo	Coinsp	Note		
Routine	6/2/2021	24	1.0	GFC	B1163	AAS			
Resources	Hours	Min	Pref	Max	Freq	Date	Need Date	Override	Notes
SNDG					24	6/2/2021	6/2/2023		See "Scour Field Evaluation Form" and "Groundline" in the files tab.
Scheduling Restrictions									Summer inspection needed for wading inspection.
Inventory	4/9/2019			SVH					SEE "CONTRACT 019391 REVISIONS" IN FILES TAB. ALSO SEE UPLOADED CONTRACT PLANS. -SVH

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION  
NBI STRUCTURE INVENTORY AND APPRAISAL REPORT  
(ENGLISH UNITS)

CD Date: 6/2/2021 Printed on: 8/5/2021  
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IDENTIFICATION			WSBIS DATA		
(1) STATE NAME - WASHINGTON		530	BRIDGE NUMBER		12/624
(8) STRUCTURE NUMBER		# 0002241A0000000	BRIDGE NAME		TOUCHET R
(5) INVENTORY ROUTE (ON/UNDER) - On		1 2 1 00012	CUSTODIAN		Washington State
STATE ROUTE MILEPOST		319.35	CROSSING DESC		TOUCHET R
(2) HIGHWAY AGENCY DISTRICT - SC Region		05	MAIN LISTING FLAG		M
(3) COUNTY CODE 71 - Walla Walla County	(4) PLACE CODE	00000	SUFFICIENCY RATING		65.18 FO
(6) FEATURES INTERSECTED		TOUCHET R	CLASSIFICATION		
(7) FACILITY CARRIED		US 12	(112) NBIS BRIDGE LENGTH		Y
(9) LOCATION		12.0 E JCT SR 730	(104) HIGHWAY SYSTEM - On the NHS		1
(12) BASE HIGHWAY NETWORK - Part of network		1	(26) FUNCTIONAL CLASS - Principal Arterial-Other		02
(13) LRS INV ROUTE AND SUB ROUTE		01200	(100) DEFENSE HIGHWAY - Not a STRAHNET route		0
(11) LRS MILEPOST		319.35	(101) PARALLEL STRUCTURE - Not a parallel bridge		N
(16) LATITUDE	46 Deg 2 Min 29.30 Sec		(102) DIRECTION OF TRAFFIC - 2-way traffic		2
(17) LONGITUDE	118 Deg 41 Min 4.10 Sec		(103) TEMPORARY STRUCTURE - Not Applicable		0
(98A) BORDER BR. - Not a border bridge (98B) (99) BORDER BR. SID - Not a border bridge			(105) FEDERAL LANDS HIGHWAY - Not Applicable		0
STRUCTURE TYPE AND MATERIAL			(110) DESIGNATED NATIONAL NETWORK - Part of network		1
(43) STRUCTURE TYPE MAIN: MATERIAL - Concrete			(20) TOLL - Non-toll structure		3
DESIGN - Arch - deck		111	(21) MAINTENANCE - State Highway Agency		01
(44) STRUCTURE TYPE APPR: MATERIAL - Concrete			(22) OWNER - Washington State		1
DESIGN - Slab		101	(37) HISTORICAL SIGNIFICANCE - Not eligible		5
(45) NO. OF SPANS IN MAIN UNIT		2	CONDITION		
(46) NO. OF APPROACH SPANS		2	(58) DECK		7
(107) DECK STRUCTURE TYPE - Conc. CIP		1	(59) SUPERSTRUCTURE		6
(108) WEARING SURFACE / PROTECTIVE SYSTEM:			(60) SUBSTRUCTURE		6
(A) TYPE OF WEARING SURFACE - Bituminous		6	(61) CHANNEL AND CHANNEL PROTECTION		7
(B) TYPE OF MEMBRANE - None		0	(62) CULVERTS		N
(C) TYPE OF DECK PROTECTION - None		0	LOAD RATING AND POSTING		
AGE AND SERVICE			(31) DESIGN LOAD - H 15		2
(27) YEAR BUILT		1900	(63) OPER RATING METHOD - Ld Factor (LFR) tons HS20		1
(106) YEAR RECONSTRUCTED		1936	(64) OPERATING RATING		40 T
(42) TYPE OF SERVICE ON - Highway & Pedestrian		5	(65) INV RATING METHOD - Ld Factor (LFR) tons HS20		1
UNDER - Waterway		5	(66) INVENTORY RATING		24 T
(28) LANES: ON STRUCTURE 2	UNDER STRUCTURE	0	(70) BRIDGE POSTING - Equal or above legal loads		5
(29) AVERAGE DAILY TRAFFIC		8081	(41) STRUCT OPEN, POSTED, CLOSED - Open, no restrictions		A
(30) YEAR OF ADT 2019	(109) TRUCK ADT	15%	APPRAISAL		
(19) BYPASS, DETOUR LENGTH		4 mi	(67) STRUCTURAL EVALUATION		5
GEOMETRIC DATA			(68) DECK GEOMETRY		2
(48) LENGTH OF MAXIMUM SPAN		50 ft	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL		N
(49) STRUCTURE LENGTH		156 ft	(71) WATERWAY ADEQUACY		8
(50) CURB OR SIDEWALK: LEFT 0.0 ft	RIGHT	3.0 ft	(72) APPROACH ROADWAY ALIGNMENT		8
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		28.0 ft	(36) TRAFFIC SAFETY FEATURES		1111
(52) DECK WIDTH OUT TO OUT		35.0 ft	(113) SCOUR CRITICAL BRIDGE		3
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		34 ft	PROPOSED IMPROVEMENTS		
(33) BRIDGE MEDIAN - No median		0	(75) TYPE OF WORK -		351
(34) SKEW 24 Deg	(35) STRUCTURE FLARED	No 0	(76) LENGTH OF STRUCTURE IMPROVEMENT		156 ft
(10) INVENTORY ROUTE MIN VERT CLEAR		99 ft 99 in	(94) BRIDGE IMPROVEMENT COST		\$1,123,000
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		28 ft 00 in	(95) ROADWAY IMPROVEMENT COST		\$225,000
(53) MIN VERT CLEAR OVER BRIDGE RDW		99 ft 99 in	(96) TOTAL PROJECT COST		\$2,246,000
(54) MIN VERT UNDERCLEAR		0 ft 00 in N	(97) YEAR OF IMPROVEMENT COST ESTIMATE		2014
(55) MIN LAT UNDERCLEAR RT		0.0 ft N	(114) FUTURE ADT		9050
(56) MIN LAT UNDERCLEAR LT		0.0 ft	(115) YEAR OF FUTURE ADT		2039
NAVIGATION DATA			INSPECTIONS		
(38) NAVIGATION CONTROL - No nav control		0	(90) INSPECTION DATE 06/21	(91) FREQUENCY 24 MO	
(111) PIER PROTECTION - Not Applicable			(92) CRITICAL FEATURE INSPECTION:	(93) CFI DATE	
(39) NAVIGATION VERTICAL CLEARANCE		000 ft	(A) FRACTURE CRIT DETAIL - NO -	Month (A) _/_	
(116) VERT-LIFT BRIDGE NAV MIN VERT CLR			(B) UNDERWATER INSP - NO -	Month (B) _/_	
(40) NAVIGATION HORIZONTAL CLR		0000 ft	(C) OTHER SPECIAL INSP - NO -	Month (C) _/_	